

APPARATUS AND METHOD FOR DETECTING ADDRESS  
CHARACTERISTICS FOR USE WITH A TRIGGER  
GENERATION UNIT IN A TARGET PROCESSOR

**Abstract of the Invention**

1 A comparator unit includes first and second comparator  
2 components. The first and second comparator components  
3 exchange signals and generate signals when certain  
4 characteristics are met. The comparator unit finds  
5 application a target processor for generating event signals  
6 can be used in test and diagnostic environments to identify  
7 address signal groups having selected characteristics.  
8 Each comparator can determine a relationship of an address  
9 signal group to a selected address. When the two  
10 comparators are coupled together, the comparator unit can  
11 determine the relationship of an address signal group to a  
12 region defined by two addresses. In addition, the  
13 comparator unit can identify a relationship between two  
14 address signal groups, each address signal group being  
15 applied to a different one of the first and second  
16 comparators.